PRODUCT DATA ANALYSIS

PHASE-3

INTRODUCTION:

In this section we are presenting the data set for my **Product Data Analysis** projects. And development the phase 2 section also. We are attaching the data set link in below content.

DataSet :

A dataset is a collection of the whole data. Whether you want to work with predictions or classification, these datasets are both interesting and helpful for machine learning projects. The data is relatively clean and lends nicely to machine learning. Plenty of variables that can help make predictions for the target column.

CLICK HERE,

Dataset Link: https://www.kaggle.com/datasets/ksabishek/product-sales-data

statsfinal [Read-Only]

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
4575	4573	08-01-2023	4657	3777	5685	1020	14762.69	23946.18	30812.7	7272.6								
4576	4574	09-01-2023	7029	3294	319	615	22281.93	20883.96	1728.98	4384.95								
4577	4575	10-01-2023	4826	292	5483	926	15298.42	1851.28	29717.86	6602.38								
4578	4576	11-01-2023	3338	2928	4184	1698	10581.46	18563.52	22677.28	12106.74								
4579	4577	12-01-2023	7155	2683	3618	1568	22681.35	17010.22	19609.56	11179.84								
4580	4578	13-01-2023	1932	950	4958	1757	6124.44	6023	26872.36	12527.41								
4581	4579	14-01-2023	7782	260	919	1078	24668.94	1648.4	4980.98	7686.14								
4582	4580	15-01-2023	6425	2862	1557	600	20367.25	18145.08	8438.94	4278								
4583	4581	16-01-2023	5962	2794	5631	1553	18899.54	17713.96	30520.02	11072.89								
4584	4582	17-01-2023	4990	2233	893	1698	15818.3	14157.22	4840.06	12106.74								
4585	4583	18-01-2023	266	2482	507	1376	843.22	15735.88	2747.94	9810.88								
4586	4584	19-01-2023	2792	2621	5676	427	8850.64	16617.14	30763.92	3044.51								
4587	4585	20-01-2023	4987	1177	3145	1112	15808.79	7462.18	17045.9	7928.56								
4588	4586	21-01-2023	6896	2799	5724	1987	21860.32	17745.66	31024.08	14167.31								
4589	4587	22-01-2023	1238	480	4003	537	3924.46	3043.2	21696.26	3828.81								
4590	4588	23-01-2023	7681	3243	3529	1128	24348.77	20560.62	19127.18	8042.64								
4591	4589	24-01-2023	6290	3084	5892	1751	19939.3	19552.56	31934.64	12484.63								
4592	4590	25-01-2023	6160	3967	3285	544	19527.2	25150.78	17804.7	3878.72								
4593	4591	26-01-2023	3225	3809	1964	1851	10223.25	24149.06	10644.88	13197.63								
4594	4592	27-01-2023	962	813	3849	1987	3049.54	5154.42	20861.58	14167.31								
4595	4593	28-01-2023	4938	3404	3957	1115	15653.46	21581.36	21446.94	7949.95								
4596	4594	29-01-2023	1227	3044	5510	1896	3889.59	19298.96	29864.2	13518.48								
4597	4595	30-01-2023	2476	3419	525	1359	7848.92	21676.46	2845.5	9689.67								
4598	4596	31-01-2023	7446	841	4825	1311	23603.82	5331.94	26151.5	9347.43								
4599	4597	01-02-2023	6289	3143	3588	474	19936.13	19926.62	19446.96	3379.62								
4600	4598	02-02-2023	3122	1188	5899	517	9896.74	7531.92	31972.58	3686.21								
4601	4599	03-02-2023	1234	3854	2321	406	3911.78	24434.36	12579.82	2894.78								

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Necessary step to follow:

1. **Import Libraries:**

Start by importing the necessary libraries,

PROGRAM :

```python
from tabulate import tabulate

table=[['SERIAL NUMBER','PRODUCTS','PRODUCT SOLD PERCENTAGE','PRODUCT STOCK    PERCENTAGE','LOACATION'],

['1','Grocery',19,81,'Tirupattur']

['2','Vegetables',89,11,'Tirupattur']

['3','Fruits',58,42,'Tirupattur']

['4','Cosmetics',0,0,'Tirupattur']

['5','Home Expenditure',42,58,'Tirupattur']]

Print(tabulate(table))
```

```
In [11]: runfile('C:/Users/SMILEYROCKE/Downloads/project.py', wdir='C:/Users/SMILEYROCKE/Downloads')
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SERIAL NUMBER  PRODUCTS          PRODUCT SOLD PERCENTAGE  PRODUCT STOCK PERCENTAGE  AVAILABLE
1              Grocery           19                      81                       Tirupattur
2              Vegetables        89                      11                       Tirupattur
3              fruits            58                      42                       Tirupattur
4              Cosmetics         0                       0                        Tirupattur
5              Home Expenditure  42                      58                       Tirupattur
-------------  ----------------  ----------------------  -----------------------  ----------
```

2. Product sold detail,

We are using the bar chart for this **product sales analysis,** This is very useful to analyze the product details.

PROGRAM :

```
Import matplotlib.pyplot as plt

Fig=plt,figure()

ax =fig.add_axes([0,0,1,1])

products=['Grocery','Vegetables','Fruits','Cosmetics','Home Expenditure']

product sold=[19,89,58,0,42]

plt.show ( )
```
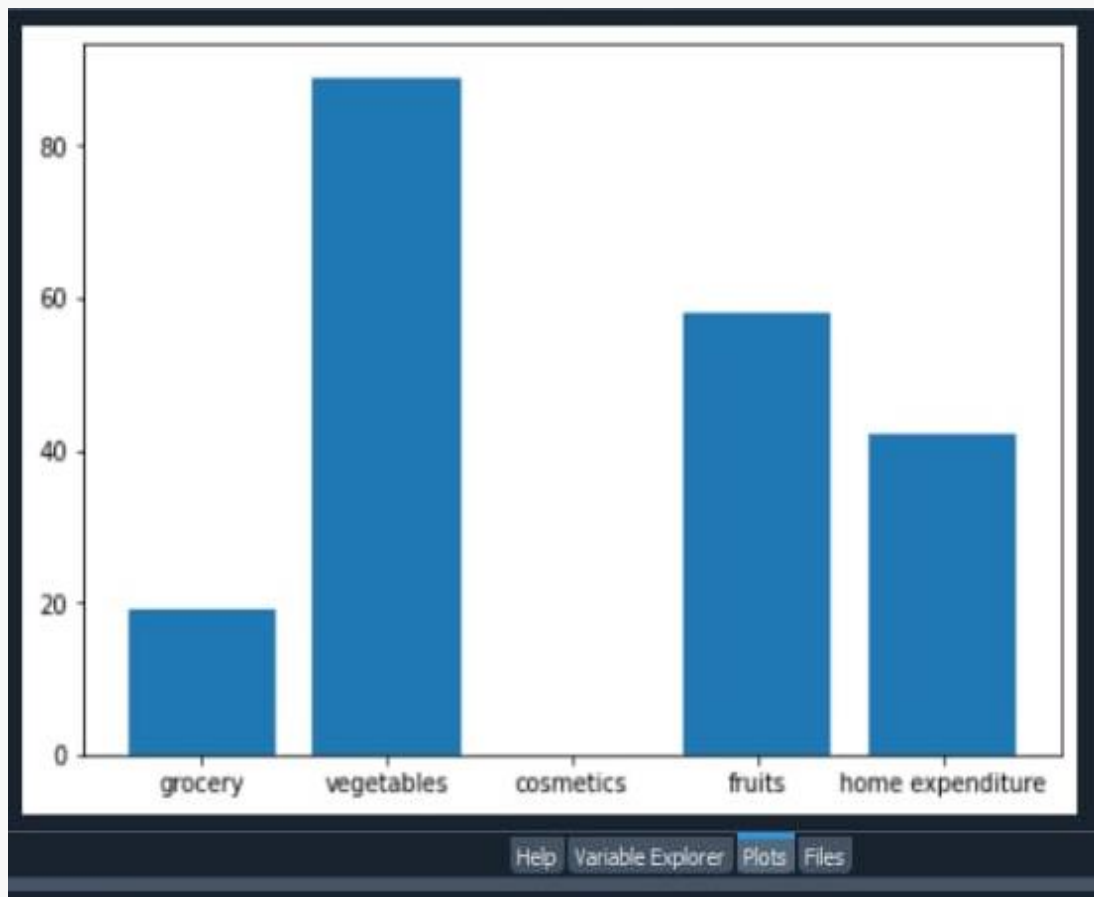
Import matplotlib.pyplot as plt

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products=['Grocery','Vegetables','Fruits','Cosmetics','Home Expenditure']

product sold=[19,89,58,0,42]

plt.show ( )
```

3.Product stock details,
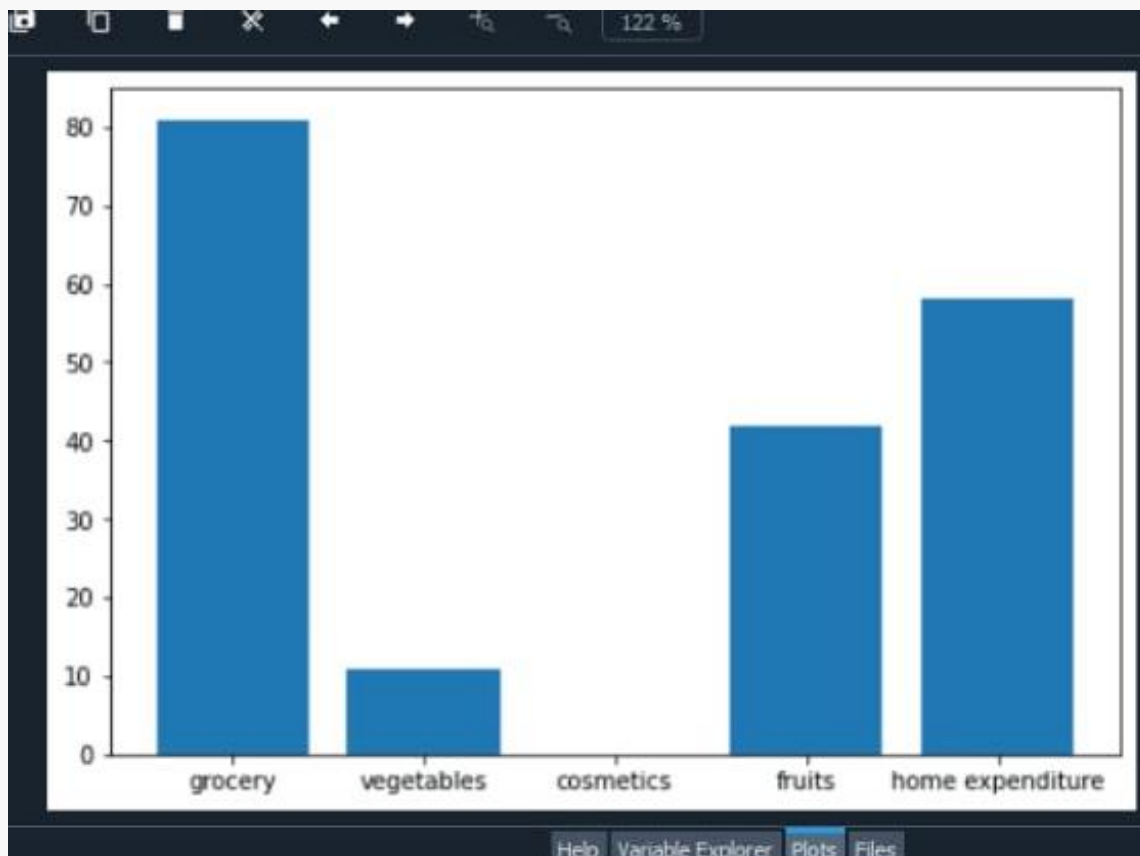
PROGRAM :

```
Import matplotlib.pyplot as plt

Fig=plt,figure()
```

```
ax =fig.add_axes([0,0,1,1])

products=['Grocery','Vegetables','Fruits','Cosmetics','Home Expenditure']

product stock=[81,11,42,0,58]

plt.show ()
```

Conclusion:

In this section we are develop our ptoject dataset and attaching some files in their section.